

RESOURCE GUIDE 2008

FROM VISION TO ACTION

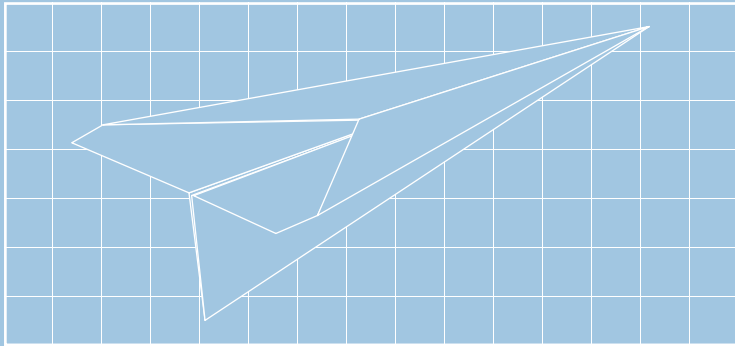


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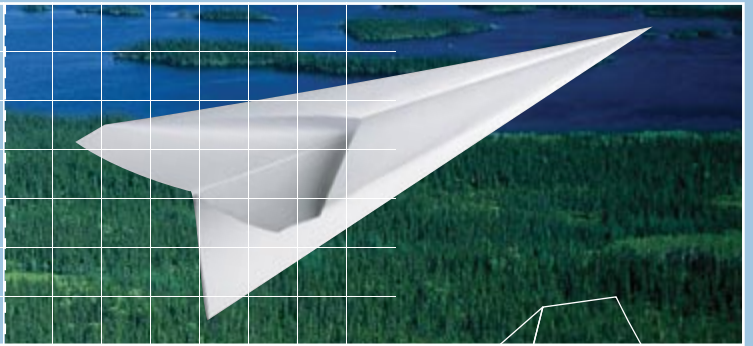


fig.2



**MARKETS
INITIATIVE**

**ÉCO
INITIATIVES**

PROTECTING ANCIENT FORESTS. CREATING NEW MARKETS.
WWW.MARKETSINITIATIVE.ORG

Markets Initiative's role is to shift consumption patterns of industrial paper consumers so that their purchases do not destroy ancient and endangered forests or contribute to climate change. The organization works collaboratively throughout the paper supply chain.

With nine years of success in facilitating shifts within the book, magazine and newspaper industries, Markets Initiative is at the forefront of creating change in global paper markets. As a result of Markets Initiative's work, over 600 publishers, printers and other large paper consumers have formally committed to eliminating their use of papers derived from ancient and endangered forests. Markets Initiative's highest-profile milestone to date is working to green the Harry Potter series internationally. Markets Initiative has mentored similar projects in nine other countries, including the US, the UK and China.

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WHY MARKETS INITIATIVE?

AS NORTH AMERICA'S LEADING ENVIRONMENTAL PUBLISHING ADVOCATES, Markets Initiative works to reduce the carbon footprints and biodiversity impacts of the North American publishing, printing and paper industries. As a result of Markets Initiative's work, more than 600 book publishers, newspapers, magazines, printers and other large paper consumers are well on their way to reducing their impact on forests, the climate and the environment in a way that is both measurable and mindful of today's market realities.

CREDIBILITY

- Markets Initiative is recognized as the leading environmental publishing advocate in North America.
- By partnering with us, your paper policy and implementation initiatives will gain credibility with the business community, your customers, the media, the public and the environmental community.

EXPERTISE

- Markets Initiative has over nine years of experience in developing Ancient Forest Friendly paper policies.
- We have developed templates and systems that are customized for the specific needs of our partner-companies. As such we can help save time and money in policy development and implementation.
- We help publishers track, quantify and report on their ecological savings.

"In six years, Rycroft would build Markets Initiative into one of the most powerful environmental forces affecting the printing and publishing world."

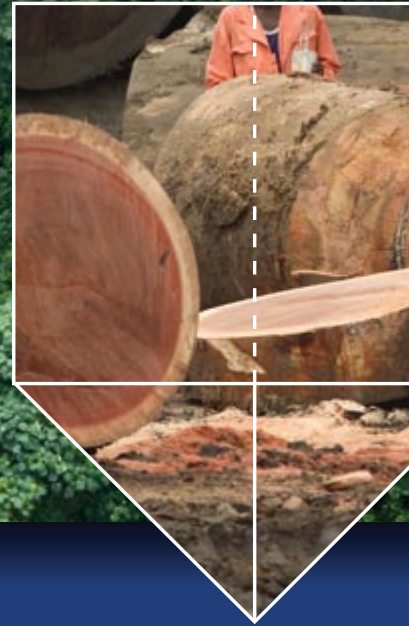
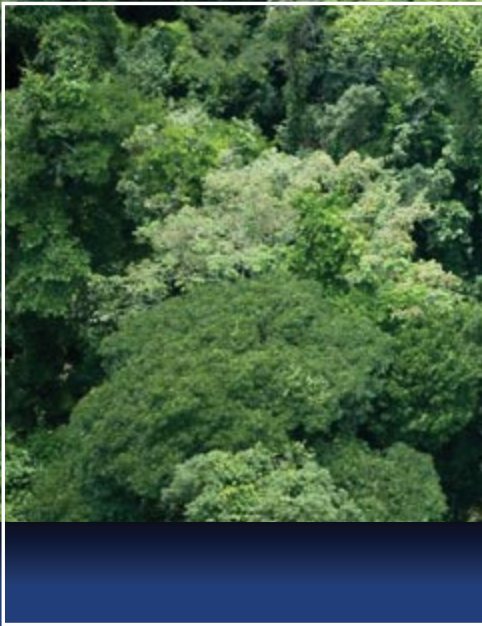
—*Print Action, March 2006*

RECOGNITION

- Our Ancient Forest Friendly™ logo is respected as the highest designation in environmental paper and is quickly gaining recognition within the marketplace.
- Markets Initiative actively promotes its partners' Ancient Forest Friendly paper policies.
- Markets Initiative will tailor communications materials to promote your new environmentally friendly paper policy.

COLLABORATION

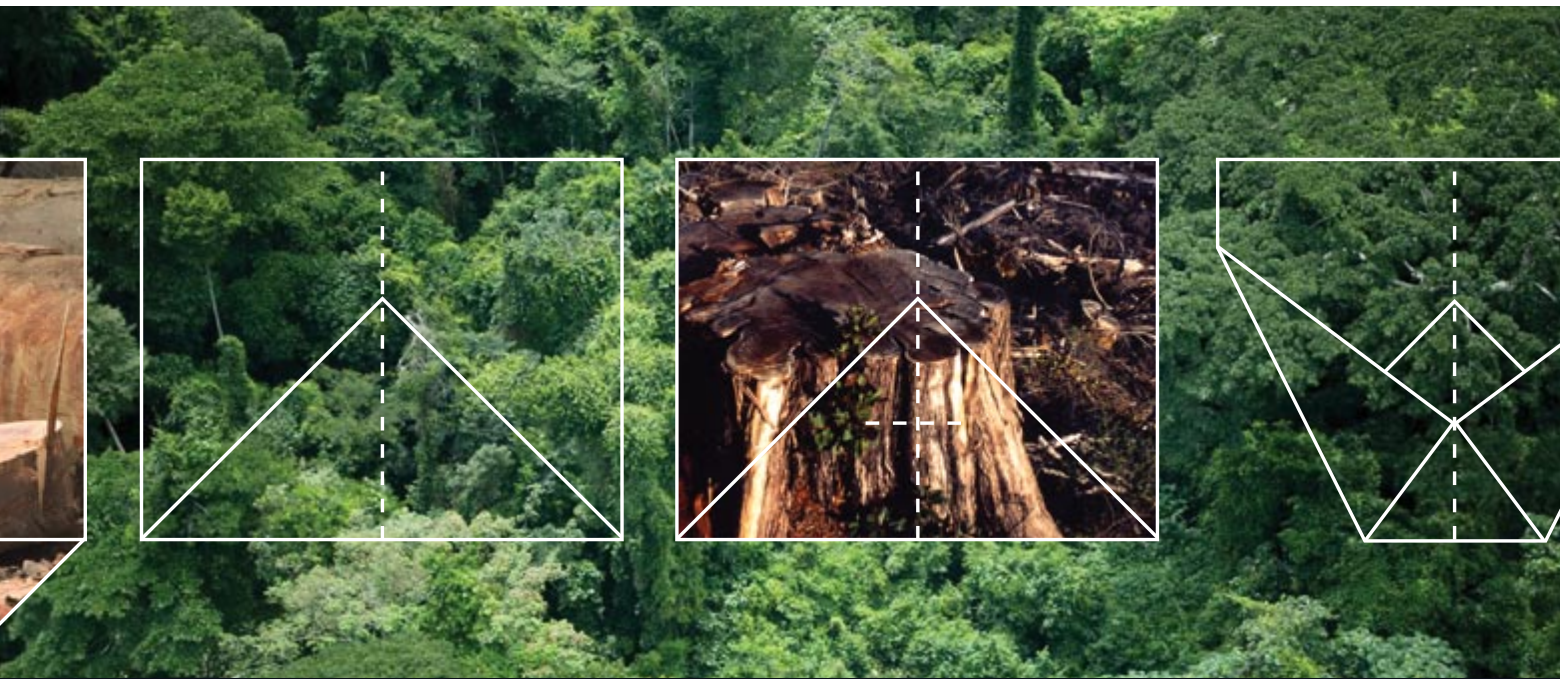
- Markets Initiative works collaboratively across the paper-supply chain and actively works with paper producers to research and develop the most environmentally friendly paper available on the market today.
- Markets Initiative is an active participant in the global environmental community.
- Markets Initiative has strong relationships with many of the world's leading authors such as Margaret Atwood, Yann Martel, J. K. Rowling and Alice Munro.



WHY TAKE ACTION TO PROTECT THE WORLD'S FORESTS?

THE WORLD'S INTACT AND ENDANGERED FORESTS are massive carbon reservoirs, helping to stabilize the earth's climate by acting as a protective shield against global warming. These forests also protect watersheds and, through the natural cycle of death, decay and regeneration, maintain soil productivity while contributing significantly to the biodiversity and resilience of the planet.

Of North America's original forest ecosystems, only two forest types remain in large tracts of relatively undisturbed intact forest ecosystems: the Boreal forest, which stretches across the north of Canada, and the coastal temperate rainforests situated on the west coast of the continent.



CANADA'S BOREAL FOREST

Canada's Boreal forest contains some of the largest tracts of intact forest left in the world, covering an area 21 times the size of the United Kingdom and comprising 25% of the world's remaining intact ancient forests.¹ The Boreal's rich biodiversity is characterized by billions of migratory birds, freshwater lake systems, fish and iconic species such as caribou. It is also home to more than 500 First Nations communities who are connected with the land by physical sustenance and cultural ways of life.

Given the rarity of old-growth forests, Canada's Boreal forests are an international treasure and one of the world's foremost conservation opportunities. Maintaining the integrity of the Canadian Boreal forest through large-scale area conservation and shifts to sustainable forest management systems is critical to maintaining the stability of the global climate. As such, this has led to the largest conservation commitment in Canadian history. On July 14th, 2008 the Ontario Government announced that it would protect at least half of the province's vast Northern Boreal forest from industrial development. It is estimated that this will lead to at least 22.5 million hectares of intact, carbon-rich Boreal forest being protected from develop-

ment—an area equivalent to the size of the UK. The expansive region of forest that will be protected is currently not open to industrial development but would have become available to industrial interests in the coming years. Publishers' eco-paper policies in support of intact forest conservation have been key in achieving this milestone.

TEMPERATE RAINFORESTS OF THE WEST COAST

Temperate rainforests originally covered just 0.2% of the world's land surface² and are significantly rarer than tropical rainforests. The diversity and complexity of these forests is a result of more than 10,000 years of post-glacial activity. Temperate rainforests are home to trees of up to 1,400 years old and British Columbia's coastal forests sustain some of the highest concentrations of biomass and ecosystem carbon on the planet. Rich, rare and fertile, these rainforests are populated with thousands of species of birds, plants and animals.

Meanwhile, the World Resources Institute classifies temperate rainforests as the most endangered forest type on the planet:³ the temperate rainforests of Alaska and British Columbia represent half of the world's remaining temperate rainforest.⁴



INTACT FORESTS: A MAJOR CARBON STOREHOUSE

THE STERN REVIEW and the Intergovernmental Panel on Climate Change identified conservation of forests, in particular intact forests, as a primary defense in combating climate change and its projected impacts on national economies and security.^{5,6} Deforestation accounts for 18% of global carbon emissions⁷—that’s higher than emissions from the transportation industry. In Canada, the forest sector is the largest single industrial user of energy and releases significant greenhouse gas emissions.⁸ Logging also removes about 36 million tonnes of above ground carbon from the eco-system each year⁹—that’s more carbon than that which is emitted from all passenger vehicles in the country.¹⁰

The Boreal forests of Canada and Russia together are the world’s largest and most important carbon storehouse – holding 22% of the total carbon stored on the earth’s land surface, almost twice as much carbon per unit area as tropical forests.¹¹ As such, they play a critical role in the fight against climate change by keeping vast amounts of carbon out of the atmosphere.

Furthermore, if logging in Canada continues at current rates over the next 10-12 years, it is estimated that another 1 million square kilometers of the Boreal¹² will be destroyed.

Canada’s Boreal has an estimated carbon storage value of \$3.7 trillion,¹³ therefore maintaining its integrity through large-scale area conservation and shifts to sustainable forest management systems such as Forest Stewardship Council (FSC), are necessary steps that must be taken to maintain the stability of the global climate and economy.

SHIFTING THE SUPPLY CHAIN AWAY FROM ANCIENT FORESTS

Intact, ancient and endangered forests still contribute the majority of fibre used to make magazines, catalogues, phone directories, newspapers, copy paper and books—especially in Canada.^{15,16} Although only 30% of the virgin fibre used globally in paper production comes from plantations,¹⁷ it is worth noting that plantations can come with their own ecological and social concerns. These forests are often a result of the conversion of natural forests into plantations resulting in soil loss and intensive pesticides use.

Consumers, environmental groups and many industry representatives agree that continued reliance on virgin wood fibre and particularly ancient and endangered forests is not an ecologically sustainable approach to paper production.



'When the Boreal forest is degraded through logging and industrial development, not only are massive amounts of greenhouse gases released into the atmosphere, but the forest becomes increasingly vulnerable to global warming impacts like fires and insect outbreaks—in many cases, impacts that cause more greenhouse gases to be released, creating a vicious circle wherein global warming degrades the Boreal forest and Boreal forest degradation contributes to global warming.'¹⁴

SOLUTIONS

WITH THE WORLD'S SPECIES AND CLIMATE hanging in the balance, we must curtail continued deforestation and fragmentation of the world's remaining intact and endangered forests.

Central to the opportunity of protecting intact forests and reducing publishers and printers' greenhouse gases emissions is increasing the availability of papers with a low carbon footprint and a minimal impact on biodiversity. Maximizing post-consumer recycled content is critical. Ensuring that virgin fibre originates from forest management areas that have protected intact forests and are certified to FSC standards is also important.

In addition, diversifying the paper fibre basket away from its current reliance on forest fibre is key. Kenaf, hemp and bamboo are all suitable for paper production, but require land allocated for their growth. An environmentally preferable option is the use of agricultural residues such as wheat straw and flax straw, which are by-products of our agricultural harvest. These fibres remain in vast quantities in the Canadian Prairies and the American Mid-West after the grain harvests, but currently no pulping infrastructure exists in North America.

In contrast, more than 20% of paper made in China and India contains agricultural fibres like wheat straw.¹⁸ In South Africa, award-winning magazines are printed on papers made with sugar cane bagasse. In North America, it will be a few years until these fibres are part of mainstream paper production. Markets Initiative, in collaboration with the Alberta Research Council and others, will continue to spearhead the development of North American agricultural paper market and infrastructure development. We anticipate a commercial-scale agricultural residue pulping scale facility in North America within the next two to three years.

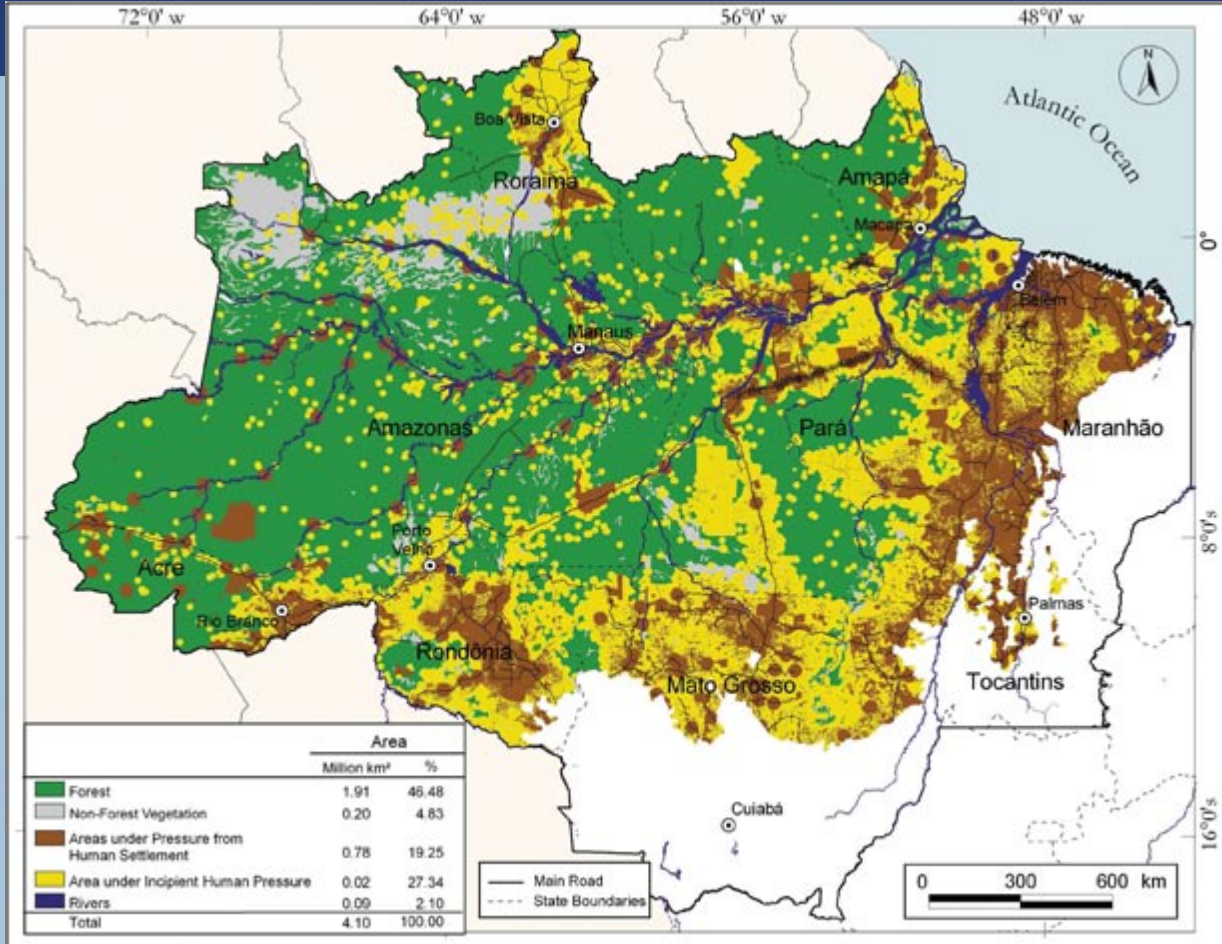
The eco-evolution of paper use in the publishing and printing industries has shown the success that is possible when major paper buyers join forces to reduce their environmental impacts. Large purchasers have been critical in driving the development of new publishing grade eco-papers, and securing large-scale conservation such as the Great Bear Rainforest Agreement (which resulted in the protection of millions of hectares of sensitive rainforest ecosystems).

Together, we are creating a new age of paper production and an environmental legacy for generations to come.

Snapshot:
**South
 America**



- Between 2006 and 2008, 4.5 million tonnes a year of new pulp capacity is expected to start operation in South America alone. The vast majority of this pulp is intended to be sold to China.¹⁹
- Brazil is currently the world leader in new pulp capacity, with 6.7 million tonnes new capacity planned.²⁰
- None of these new mills are planned to have de-inking/recycling facilities and there is no increase planned in agricultural fibre production. The mills are also amongst the most polluting of industrial facilities and pose a serious threat to rivers, fisheries and drinking water.
- Associated with the expansion of pulp capacity is a huge increase in the area of industrial tree plantations. These vast areas of monocultures have severe impacts on biodiversity, water, land rights and livelihoods.



Forest pressure and fragmentation in the Brazilian Amazon. World Resources Institute: *Human Pressure on the Brazilian Amazon Forests*, 2006

A New Green. A New Green Consumer.

In late 2007, Markets Initiative commissioned Pollara, a national opinion research firm to conduct an online survey on the topic of environmental issues, publishing and green marketing to 2,271 Canadians.* This research has shown that while the environment is now a top-ranking issue concerning North Americans, it's not enough to just talk the 'green' talk. This emerging consumer environmentalism has translated into expectations around 'green' criteria and discerning support of companies who make environmental claims. Consumers are aware about what makes a publisher or printer truly 'green' and in turn want to see meaningful action taken by companies as well as transparent reporting on a company's progress towards its environmental goals.

Snapshot:

China



- The Chinese paper and forest products sector is the second largest in global production and consumption.
- Between 1989 and 2004, China’s aggregate consumption of paper and paperboard has grown almost 10% each year, from 14.6 million tonnes to 48.0 million tonnes. Domestic production of paper and paperboard has grown at a similar rate to consumption, expanding from 13.7 million tonnes in 1990 to 43.0 million tonnes in 2003.²¹
- By 2010, paper fibre demand in China is expected to grow to 68.5 million tonnes.²²
- China is quickly becoming the key print center for book publishers around the world.
- Legislation in China often fails to protect the air, water and land affected by mills and logging. There is also concern about the inadequate protection of human health and worker safety associated with these industries.

Seeking Responsible Paper Production Worldwide

IT IS ANTICIPATED that in the next five years, the global pulp and paper industry will increase new pulp capacity by 25 million tonnes—an average of five million tonnes a year.²³ As pulp and paper production rapidly shifts from North America to other parts of the world, South America, Eastern Europe and China are quickly becoming epicenters of global paper production and infrastructure development.

South America and China are the two key global areas of pulp and paper mill expansion. China has historically relied on agricultural fibres as a paper fiber source. Approximately 20% of papers made in China today contain agricultural residues or fibres. Unfortunately new paper infrastructure being built in China is shifting to wood fibre technology due to the influence of western partners and consultants. This shift in fibre

sourcing will heavily impact the world’s forests and forest dependent communities and species—especially those in Indonesia, Russia, South America and Canada. In South America, the massive growth of mill capacity is completely reliant on wood fibre. This places additional stresses on the forest ecosystems and communities of the Amazon by increasing the pressure to convert intact forest into plantations.

North American publishers now have an important role to play in ensuring that we do not shift our consumption impacts to other areas of the world. By working with Markets Initiative, North American publishers and printers can exert coordinated pressure on paper companies to develop socially and environmentally responsible facilities in China and South America.

What we can do:

- Formally commit to support paper production infrastructure in China and South America that does not contribute to the destruction of endangered forests globally.
- Ask your offshore printer for Ancient Forest Friendly™ papers.
- Help Markets Initiative and partners build a base of support within Chinese print and publishing industries for sustainable paper production.
- Engage financial institutions to influence projects in positive directions in China and South America.

78%
of Canadians say they feel that companies are often marketing themselves to be greener than they are in practice

Only 1%
of consumers ‘very much’ trust ‘carbon-neutral’ claims

95%
of Canadian consumers think it’s important for companies to develop an environmental policy action plan and show clear progress towards targets

6 in 10
readers do not trust the credibility of publishers that run green editions on paper that is not eco-friendly

* The online survey was conducted from November 9th to November 13th, 2007. Results are considered accurate to ±2.1%, 19 times out of 20.

One of the most significant, and perhaps least understood, impacts of the paper industry is climate change. Every phase of paper's lifecycle contributes to global warming from harvesting trees to production of pulp and paper to eventual disposal.²⁴

INSPIRING CARBON REDUCTION INITIATIVES

PUBLISHERS THAT HAVE TAKEN the initiative to measure their carbon footprint are discovering a significant portion is linked to the lifecycle of their paper choices. In fact, various reports suggest 48-88%^{25,26,27} of a publishers' carbon footprint is due to their paper use, depending on the paper type and measurement variables.

THE TRUTH ABOUT CLIMATE AND PAPER



Consequently, climate change is becoming a major factor in paper sourcing and is starting to shape industry innovation and investment. For major paper purchasers and producers, effective carbon mitigation strategies include embracing low carbon papers and technologies, reducing overall fibre consumption, reducing the carbon footprint of the fibre and energy used for paper production, and working with government agencies to conserve and protect intact and endangered forests. With this in mind, Markets Initiative has identified the following steps in credible carbon reduction initiatives:

- 1 Measure, with a credible environmental organization, the entire **footprint** of your operations, including:
 - Loss of biomass and emissions due to deforestation and forest fragmentation, including emissions from soil disruption
 - Pulp transportation to mill
 - Paper production at mill
 - Paper transport to printer
 - Printing and production at printer
 - Distribution to subscribers and the newsstand
 - End result of unsold copies
 - Office energy use for lights and equipment
 - Staff travel and commutes
- 2 Shift as much paper use as possible to **online** and electronic sources.
- 3 **Reduce** trim size and basis weights where possible.
- 4 Shift as much of the remaining paper as possible to **high-recycled content** papers. Using 100% recycled paper will reduce emissions associated with paper production by 38-48%,²⁹ as well as alleviate the pressure to log forests and reduce the volume of solid waste.
- 5 Look at sourcing papers with **agricultural residue** fibres where possible.
- 6 If the paper contains virgin wood fibre, ensure it is **FSC certified** as FSC certified fibre often carries a lower carbon footprint than other virgin fibre.
- 7 Source paper from mills that use certified **renewable energy** like biogas and wind. Purchasing papers from these mills also helps realize another level of carbon reduction.
- 8 Once you have reduced your footprint as much as possible, **offset** the rest by investing in 'gold standard' renewable energy offsets.

When paper decomposes in a landfill, it releases methane, a greenhouse gas that is 21 times more powerful than carbon dioxide in terms of its warming potential. Methane accounts for about 14% of the carbon footprint of the average book.²⁸



HOW TO DESIGN AN ANCIENT FOREST FRIENDLY™ PAPER POLICY



An Ancient Forest Friendly™ paper procurement policy should include the following key elements and targets:

PROTECT ANCIENT AND ENDANGERED FORESTS

- Work with suppliers to ensure that forest management practices conserve ancient and endangered forests and their associated biodiversity and ecosystem services.
- Conduct due diligence with paper suppliers regarding their forest management practices via a chain-of-custody document to ensure fibre is not coming from intact forests, forests of high-conservation value like caribou or other endangered species habitat or areas of social conflict
- Require Forest Stewardship Council (FSC) certified 'pure' fibre when virgin wood fibre is needed
- Include a definition of ancient and endangered forests (refer to definitions in glossary)

Ancient Forest Friendly™ paper must be manufactured with a high percentage of recycled fibre or agricultural residue. Any virgin fibre used must be FSC-certified and not originate from an endangered forest. Bleaching must be chlorine free. Ancient Forest Friendly™ papers have low carbon footprints and conserve intact forest ecosystems and their functions, such as climate stabilization, water regulation and species habitat



**ANCIENT FOREST
FRIENDLY™**

MAXIMIZE RECYCLED CONTENT

- Set targets to source papers with maximized recycled and specifically post-consumer recycled content—ideally to 50–100%, depending on the paper type

SUPPORT ALTERNATIVE FIBRE SOURCES

- Provide market support for research and development of commercial scale production of pulp and paper from agricultural residue fibres
- Source papers made from agricultural residue fibres such as flax or wheat straw when available

REDUCE CARBON FOOTPRINT

- Give preference to papers which have qualities that reduce their carbon footprint, such as increased recycled and/or agricultural residue contents, basis weight and trim size reductions.
- Give preference for paper manufactured by suppliers that use effective measures to reduce their carbon footprint through fibre sourcing and alternative forms of energy (wind, solar or biogas energy) in their production
- Engage suppliers on curbing operations in/or sourcing from high carbon value intact and old growth forests
- Explore other business areas where carbon reduction strategies can be implemented

PREVENT POLLUTION

- Give preference for paper manufactured by suppliers that use effective pollution/emission prevention measures that meet and exceed local laws
- Source papers that are produced with responsible bleaching technologies (i.e. processed and totally chlorine free processing)
- Work with printers who use environmentally friendly-technology and procedures

INCREASE PAPER EFFICIENCIES AND REDUCE CONSUMPTION

SET TIMELINES, BENCHMARKS AND ACCOUNTABILITY

- Set timelines, benchmarks and mechanisms for accountability so that progress can be celebrated

INVOLVE ALL STAKEHOLDERS IN PROCESS AND IMPLEMENTATION

- Involve key employees
- Encourage supplier compliance
- Create marketing plan to promote new policy

PROMOTE INDUSTRY LEADERSHIP

- Promote Ancient Forest Friendly™ purchasing policy to employees, customers and business community

For an electronic policy template, please contact us.



'ECO'-CHANGE MANAGEMENT FOR YOUR COMPANY

BEYOND PRACTICAL TOOLS and systems, successfully implementing an environmental policy involves permeating a new environmental and social consciousness throughout the company. Long-lasting change requires a shift in culture, supported by strong leadership, vision and tenacity.

Creating and supporting significant change can be broken down into an eight-step process: *

1. ESTABLISH A SENSE OF URGENCY

- Examine current market and ecological realities
- Identify and discuss potential crises or major opportunities of both 'business as usual' and environmental leadership

2. CREATE A GUIDING COALITION

- Create a team of various personnel who will lead the initiative
- Choose people with enough passion and power to lead the change

3. DEVELOP A VISION AND STRATEGY**

- Create an environmental vision to focus change
- Develop strategies for achieving the vision, including measuring and setting benchmarks

4. COMMUNICATE THE VISION

- Use every vehicle possible to regularly communicate the new vision and strategies
- Choose a role model with strong environmental leadership on the Senior Management Team

5. EMPOWER EMPLOYEES FOR BROAD-BASED ACTION

- Reduce obstacles: provide needed training and align systems to support your Ancient Forest Friendly™ initiative
- Change systems or structures that undermine the environmental vision
- Encourage risk taking and non-traditional ideas, activities, and actions

6. GENERATE SHORT-TERM WINS

- Plan for visible improvements in performance, or 'wins'
- Create those wins
- Visibly recognize and reward people who made the wins possible

7. CONSOLIDATE GAINS AND PRODUCE MORE CHANGE

- Build on successes to change all systems, structures, and policies that don't fit together and don't fit the transformation vision
- Hire, promote, and develop new people who can implement Ancient Forest Friendly™ policy
- Reinvigorate the process with new projects, themes, and change agents

8. ANCHOR NEW APPROACHES IN THE CULTURE

- Create better performance through results-oriented behaviour, more and better leadership, and more effective management, encourage creativity and healthy competition to push milestones
- Articulate the connection between new behaviours and organizational success
- Develop means to ensure leadership development and succession

* Notes on Change Management Adapted from Leading Change by John P. Kotter, Harvard Business School Press (1996)

** See How to Design an Ancient Forest Friendly Paper Policy, page 10 of this Resource Guide

SUPPORTING YOUR COMPANY TO BECOME ANCIENT FOREST FRIENDLY™

AS NORTH AMERICA'S FOREMOST environmental publishing advocate, Markets Initiative is a valuable resource that can help support the development and implementation of your Ancient Forest Friendly™ paper policy.

DEVELOPING YOUR ANCIENT FOREST FRIENDLY™ PAPER PURCHASING POLICY

- Help in building a science-based understanding of the social and ecological context for developing an environmental paper purchasing policy
- Advice and support in mapping out the steps involved in developing an Ancient Forest Friendly™ policy
- Proprietary resources including:
 - Policy templates and sample documents
 - Print and presentation materials for internal education initiatives

BUILDING BUY-IN AND OWNERSHIP

- Support in building an education program for your board, staff and clients
- Advice on staff engagement strategies
- Advice and support on 'institutionalizing' initiatives
- Proprietary resources including:
 - Educational materials
 - Presentation templates
 - HR templates
 - Eco-paper purchase order forms
 - Eco-audits to convey the tangible results of your Ancient Forest Friendly initiative

IMPLEMENTING YOUR NEW ENVIRONMENTAL POLICY

- Support with the supplier engagement process
- Support in researching the availability of and sourcing environmental papers and printers stocking Ancient Forest Friendly™ papers
- Tips and strategies on effective change management systems
- Consultation for interpreting Chain of Custody documents
- Proprietary resources including:
 - Up-to-date eco-paper database
 - Tailored internal paper tracking forms and purchase orders
 - Supplier profiles

BRAND AND SOCIAL MARKETING SUPPORT

- Guidance on 'green branding' with environmental integrity
- Guidance on consumer trends and polls
- Provide audit of ecological savings and progress on benchmarks
- Support with media campaigns to promote your eco-paper policy
- Proprietary resources including:
 - Templates for social marketing pieces (print and online)
 - Latest consumer polling data

FACILITATING NEW PAPER DEVELOPMENT

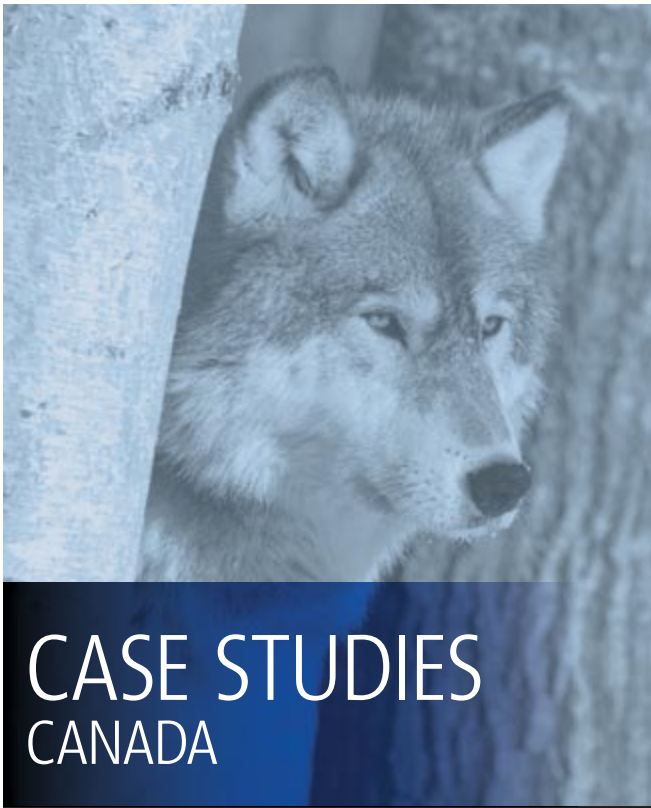
- Act as liaison with mills to develop new papers and improve existing products
- Work to increase the availability of recycled paper fibre and papers made with agricultural fibres in Canada and North America
- Act as liaison with government to facilitate new eco-friendly paper development
- Proprietary resources including:
 - Template mill letters
 - Paper target matrixes

FACILITATING INDUSTRY-WIDE INITIATIVES

- Facilitating purchasing co-ops and networks
- Advocating for structural incentives with government
- Supporting trade association initiatives
- Proprietary resources including:
 - Up-to-date sector specific paper eco-kits
 - Draft policy frameworks

CREATING TAILORED SOLUTIONS FOR YOUR COMPANY'S NEEDS

- We know your organizational needs are unique, and can tailor implementation support solutions for your company



CASE STUDIES CANADA

TRANSCONTINENTAL

Transcontinental, the largest printer in Canada and the sixth largest in North America, released their eco-paper purchasing policy in October 2007. Due to the volume of paper influenced by this policy, this is one of the most exciting environmental paper developments in North America to date.

The policy includes an environmental hierarchy, which states a top-level preference for domestically produced 100% recycled papers. This policy applies to all their business divisions, including more than 40 consumer magazines, almost 170 newspapers, Quebec's largest educational publisher and more than 60 North American print plants.

Transcontinental has already made strong headway in implementing their policy. Since introducing their policy, they have increased the volume of papers that meet the qualities of the top two tiers of their environmental paper hierarchy by 9%—from 16% to 25%. Three of their magazine titles have switched to Ancient Forest Friendly™ papers. Transcontinental's policy has facilitated a number of their print clients switching to Ancient Forest Friendly™ and eco-papers, on both the uncoated and coated paper fronts. Initiatives such as Transcontinental's book printing division offering 100% recycled, Ancient Forest Friendly™ paper at close to price parity is just one way they are achieving this.

Given the scope of their customer base, it is expected that their policy will have broad environmental and supply chain impacts. For more details on all of Transcontinental's recent green successes and plans, visit *2007 Initiatives, Environmental Action Plan* at www.transcontinental.com/en/3-whoware/Brochure_enviro/accueil.html

WEBCOM

For more than thirty years, Webcom has been one of Canada's leading printers of books, catalogs and directories. Now they are showing leadership in developing a suite of environmental initiatives that preserve endangered forests while also helping to build and shape the market for environmentally improved paper.

In the spring of 2008, Webcom released their Environmental Paper Policy. At the center of this initiative is Webcom's Legacy line of publishing papers. The Legacy name indicates paper grades that have environmental qualities, and many of those grades contain 100% recycled content and/or FSC certification. Webcom proactively sources paper grades that will fit into the Legacy line, and endeavours to offer an environmental option for each paper grade that they carry.

In cases where viable options are not available, Webcom engages their suppliers to create new eco-paper products to fill any gaps in the market. They have also embarked on a sales training program for their sales staff, and now, with every quote, Webcom's sales team has an environmental alternative available to quote to the client. By demanding, showcasing and nurturing environmental paper options, Webcom has been able to help their clients become more green.

Webcom is also a strong advocate to their clients about the need to go green. Webcom's leadership includes publisher education and sharing of that benchmarking data in order to find the places where they can shift buying habits to be more environmentally conscious while satisfying the needs of the publishing marketplace. On other fronts, their award-winning internal recycling program captures 98% of their paper waste so that it can be turned back into new paper.

THE GLOBE AND MAIL

The Globe and Mail is Canada's premier national newspaper and has been in print for 163 years. In recent years, the newspaper has been joined by several magazines, including Canada's most read business magazine, *Report on Business*. This fall, *The Globe and Mail* led a North American first: they became first North American national newspaper to develop an Ancient Forest Friendly policy in collaboration with Markets Initiative.

The policy states:

"The Globe and Mail believes that a commitment to source ecologically sustainable paper can be implemented in harmony with a commitment to source its papers according to price, availability and product quality."

Highlights of the policy include:

- a commitment to eliminate the use of fibre from ancient and endangered forests, such as the Canadian Boreal Forests; Temperate Rainforests of British Columbia, Alaska and Chile; and the Tropical Rainforests of Indonesia and the Amazon.

- a commitment to progressively maximize recycled content in all of its papers by working with suppliers to establish interval benchmarks for post-consumer recycled content.
- a preference for virgin wood fibre certified by the Forest Stewardship Council.
- a commitment to actively encouraging suppliers to eliminate the production of persistent organic pollutants or chlorine bleach.
- a commitment to explore the use of non-wood agricultural residues

The Globe and Mail's policy also includes a commitment to implementing and expanding internal business processes that will reduce paper use and encourage maximized paper recycling. As such, *The Globe and Mail* has already established an internal Green Team that is comprised of staff across the company's various departments to help implement all elements of this groundbreaking policy as well as other environmental initiatives of the company.

INDIGO

With 249 retail locations across Canada, Indigo Books & Music Inc., is the country's largest book retailer. For practically every book publisher and distributor selling into the Canadian market, Indigo is the largest part of their sales volume, and to book consumers, Indigo and its family of brands are the most trusted retail destination. This has combined to make one of Canada's leading consumer brands, and a global example of successful book retailing.

This fall, recognizing that they could play a leadership role in greening themselves and the publishing industry, Indigo launched a broad-ranging environmental policy focusing on paper procurement. This policy is part of a larger environmental commitment that includes a new environmentally focused staff position as well as numerous changes to their internal practices around consumption, waste and procurement. Where Indigo's policy differs from many others, though, is in what it asks of its retail partners.

Beyond the greening of its own internal practices, Indigo has shown leadership by challenging its vendors to green theirs. By incorporating recycled paper targets into their standard vendor agreement, Indigo is setting a bar for publishers, and using its influence to shift the entire publishing industry in Canada and beyond. Indigo has asked publishers that every book sold in their stores meet a minimum requirement of recycled paper content. For uncoated paper, Indigo has set a one year target of 20% post-consumer recycled content, a two year target of 30% and a five year target of 50%. For coated paper, Indigo has set targets of 10% in one year, 20% in two years and 50% in five years. For products meeting these targets, Indigo will be offering marketing incentives in-store and online. With Indigo's considerable market share, these initiatives will shape the future direction of Canada's book industry on recycled paper.

This groundbreaking leadership in book retailing will not only encourage publishers to publish on more environmentally friendly paper, it will also demonstrate to consumers that they can make their purchasing decisions based on the environmental as well as literary qualities of a book.

QUÉBEC AMÉRIQUE

Québec Amérique, one of Québec's major literary publishers became a signatory with Markets Initiative in August 2007 when they finalized their overarching environmental paper policy for books and other printed materials.

"Québec Amérique is committed to protecting the environment and to the responsible use of natural resources. We are concerned about the future of the world's remaining intact forests and are specifically concerned about rare and threatened forest types. We are committed to implementing policies that will facilitate the meaningful conservation of intact forests and ensure that we are not contributing to the destruction of these irreplaceable natural treasures."

"As a book publisher, paper is obviously a core part of our business. It is our intention to ensure that all wood-based products that we consume in the future are derived from ecologically sustainable sources, i.e. free of ancient forest fiber and chlorine-free."

Highlights of their policy include:

- Eliminating the use of papers containing ancient and endangered forest fibre
- Giving priority to pre consumer or post-consumer recycled products
- Giving priority to chlorine-free products

A successful step-by-step implementation

For the first year of their initiative, Québec Amérique began by shifting their entire *Collection jeunesse* (youth collection) on 100% post consumer recycled paper, which represents 20 new titles—ranging from 3,000 to 15,000 copies each—and approximately 50 reprints per year, for a current total of 70 titles, saving the equivalent of 1,679 trees. In January 2007, they started their *Première impression* collection and printed it on 100% post consumer recycled paper. The collection *Première impression* aims to give to emerging young authors the opportunity to become better known. So far, no cost increase was experienced in relation to their change and they envisage to shift three other collections, representing 16 new titles, in 2009.

Québec Amérique minimized their office fibre consumption by expanding their work with electronic documents. They have been one of the first participants in a pilot project with one of their printers, aiming to eliminate paper proof copies by replacing them with online electronic files. For a year, they have been using this system to reduce their paper consumption and transportation costs. As for public outreach, some of the *Collection jeunesse* authors have agreed to promote the environmental policy to schools, an initiative that is appreciated by both pupils and teachers. Some kids even expressed that they prefer illustrations on recycled paper!

continued



CASE STUDIES INTERNATIONAL

THE GUARDIAN UK

The Guardian, the UK's first full-colour national newspaper, boasts a daily circulation of 355,750 and publishes *The Guardian Weekly*, one of the world's best-selling international weekly newspapers. *The Guardian* is also an extraordinary example of a publisher who is walking the green talk as well. Each year, *The Guardian* produces 'Living Our Values,' which provides annual reporting on their environmental and corporate social responsibility initiatives.

Liz Forgan, Chair of the Scott Trust, the company that owns *The Guardian* states "*The Guardian* and *Observer* cannot honourably take the stance they do in their editorial pages unless we apply our minds with equal seriousness to the way we run our company."

While many companies are setting their sights on going 'carbon-neutral', *The Guardian* is aiming to become something they are calling 'carbon positive,' which is simply going beyond being carbon neutral and instead aiming to have a positive on affect climate change mitigation. To do this *The Guardian* offices and print sites are committed to energy efficiency, minimizing waste and maximizing recycling. The company aims to reduce their energy consumption, use renewables and offset emissions only where there are no real alternatives.

After an independent third party (Carbon Trust) audited their carbon footprint, *The Guardian* found that 72% of their carbon footprint came from their newsprint (not including disposal, collection or transportation). For this reason sustainability drives the procurement processes at *The Guardian* and as such the newspaper aims to consistently increase the amount of recycled and certified virgin newsprint in their products and work across the industry to minimize the ecological footprint of paper supplies and newspaper distribution.

Rather than devise a policy that merely 'sits in some filing cabinet,' *The Guardian* has set annual improvement targets in order to send a signal to all their partners in the supply chain. In 2008, 87% of *The Guardian's* newsprint was recycled content—a content well above the industry average in the UK.

HACHETTE LIVRE UK

Hachette Livre UK is the largest and one of the most diversified book publishers in the UK. They are committed to working with environmental organizations to ensure that their policies and practices not only protect the environment but also improve it wherever practical.

Their policy states:

"Our view is that care for the environment goes hand in hand with good business practice and we are continually developing and revising a sustainable publishing model to satisfy ever more ambitious aspirations in both these respects."

"The area in which we believe we can make the biggest difference is in the sourcing and conservation of paper, board and packaging. We are profoundly concerned that our use of these materials should not destroy or degrade ancient forest habitats that are home to people, animals, birds and plants and we positively reject irresponsible logging."

Highlights of the policy include:

- A preference for post-consumer recycled fibre
- A process to gain full Forest Stewardship Council (FSC) certification on a company-by-company basis.
- An aim is to move all their trade publishing onto FSC-certified papers by the end of 2009.
- Commissioning the Carbon Trust to advise them on a long-term strategy to improve energy management emissions reduction.
- A Returns and Overstock policy that addresses the cost and environmental damage of over-printing and multiple transportation of books. The policy specifically precludes 'shelf-clearing', the practice of sending back to the publisher for credit, books which do not sell. Hachette estimates the cumulative initial saving will be the printing, paper, processing and transport of over one million books a year.
- The policy establishes an Environmental and Ethical Board, which monitors and reports on the group's initiatives.

GLOSSARY OF GREEN

WADING THROUGH THE ECO-PAPER LEXICON

Ancient and old-growth forests refer to forest areas that are relatively undisturbed by human activity. Ancient forests vary significantly in age and structure from forest type to forest type and one bio-geo-climatic zone to another. Boreal forests, temperate or tropical rainforests may all be classified as ancient or old growth forests. A number of features characterize ancient forests, including: they have not undergone significant industrial activity, they are dominated by a range of indigenous tree species and they support old-growth dependent species like the endangered Spotted Owl.

Endangered forests are so rare, threatened or ecologically vulnerable, and are of such global biological importance that any commercial use could irreparably damage their conservation value. There are four ecological categories of endangered forests:

- Intact forest landscapes (also known as frontier forests)
- Restoration and remnant forest types
- Exceptional biodiversity values (e.g., rare forest types, forests exhibiting high endemism or species richness)
- Core habitat of focal conservation species

Ancient Forest Friendly™ papers possess the highest ecological qualities in the paper industry. In order to be Ancient Forest Friendly, 100% of the paper fibre must have ecological attributes and the paper must be manufactured with a high percentage of post-consumer recycled, recycled and/or agricultural residue. Any virgin fibre used in the paper must be both Forest Stewardship Council (FSC) certified and assessed not to originate from endangered forests. Bleaching must be chlorine free. Ancient Forest Friendly papers are low carbon and low biodiversity products that conserve intact forest ecosystems and their ecosystem functions.

Sustainably-managed forests: Currently, only forests certified by the FSC are recognized broadly as responsibly managed. FSC requires operators to manage their forest tenures in accordance to a set of criteria that includes high-conservation value

forests, endangered species, genetically modified trees, the conversion of natural forest into plantations and the impacts on aboriginal peoples.

Deforestation is the conversion of forested areas to non-forest land for use such as arable land, pasture, urban use, logged area, or wasteland. Generally, the removal or destruction of significant areas of forest cover has resulted in a degraded environment with reduced biodiversity. In many countries, massive deforestation is ongoing and is shaping climate and geography. Deforestation results from removal of trees without sufficient reforestation, and results in declines in habitat and biodiversity, wood for fuel and industrial use, and quality of life. Deforestation is often cited as one of the major causes of the enhanced greenhouse effect. According to the Intergovernmental Panel on Climate Change, deforestation, mainly in tropical areas, accounts for up to one-third of total anthropogenic carbon dioxide emissions.

Forest fragmentation in its most general sense is the break-up of an intact forest area, e.g. by logging and road-building. There is some variation in the definition, particularly the quantifying factors however, the most common theme of fragmentation is the process of a contiguous land base being divided into smaller pieces. In particular, the conversion of a large area of native forest into other types of vegetation/land use, leaving remnant patches of forest that vary in size and isolation.

Recycled papers are products that have been reconstituted into new fibre. Post-consumer recycled paper differs from papers that are often labeled as 'recycled' or pre-consumer recycled paper, in that it is a finished material made from paper that has been used by end consumers. Often paper labeled as 'recycled' is often a mix of pre-consumer, post-consumer and virgin fibres.

The Wheat Sheet is a high-quality magazine grade paper made with wheat straw fibre. The Wheat Sheet made its North American debut with the June 2008 issue of Canadian Geographic magazine, marking a new era in North American publishing

and papermaking. This issue's paper contained 20 percent wheat straw and 40 percent recycled fibre content, with the balance coming from wood pulp. Straw-based pulps can halve a paper's ecological footprint and still provide exceptional strength and print quality.

Low-carbon and low-biodiversity footprint papers are papers that contain high-recycled content, agricultural residue fibre and Forest Stewardship Council certified 'pure' fibre where virgin fibre is necessary. These papers can also be made at mills utilizing renewable energy like wind, solar and biogas, certified by a credible green energy certifier like Green-e.

Carbon-neutral paper: 'Carbon neutral' is term that refers to attempts to balance the amount of carbon released with the amount sequestered or offset. Currently there is no overarching standard body governing carbon neutral claims, which makes credible accounting difficult. It is an especially problematic term when applied to paper composed of virgin tree fibre as it has often been applied to energy reduction measures at the mill and offsets purchased for the energy used to produce the paper, while ignoring the heavy role that virgin paper plays in 'deforestation' and 'fragmentation'—both major contributors to global carbon emissions. Conversely, there are also mills in North America promoting carbon neutral paper that is 100% recycled and offset with wind projects—papers we have identified as low carbon options.

Chlorine-free is a virgin pulp or paper product, which has been produced without the use of chlorine compounds, including elemental chlorine gas, chlorine compounds and chlorine derivatives. Totally Chlorine Free (TCF) and Processed Chlorine Free (PCF) are the most environmentally friendly choices. PCF products contain post consumer recycled fibre content, which has been bleached with a process that does not use chlorine compounds. Any virgin fibre in these papers is TCF. Post-consumer recycled papers cannot be labeled totally chlorine-free as the original pulp source is indeterminate.

ADDITIONAL RESOURCES

Book and Magazine Eco-Kits

A compendium of tips, terms, resources and papers for environmental friendly book and magazine publishing. Available online at: www.marketsinitiative.org/index.php?page=105

Eco-Paper Database

A listing of the best eco and Ancient Forest Friendly™ papers available in the Canadian marketplace. Available online at: www.marketsinitiative.org/resources/paper-database

Trend Report 2008: Finding Integrity in the Eco-Paper Market

Report by Markets Initiative, 2008. Available online at: marketsinitiative.org/index.php?page=trend-report-2008

PulpWatch – NEW!

An online resource rating the performance of global pulp and paper mills according to criteria of the Common Vision for a Sustainable Paper Industry developed by the Environmental Paper Network. Ratings are based on publicly available data on fibre supply, forest certification, bleaching criteria and social performance. Available online at: www.pulpwatch.org/

Reducing Climate Impacts, A Guide For the Book and Newspaper Industries

Report by Green Press Initiative, 2008. Available online at: www.greenpressinitiative.org/documents/climateguide.pdf

Vancity Carbon Neutral Project

Read more about what Vancity did to become the first “carbon neutral” financial institution in Canada online at: www.vancity.com/MyCommunity/OurVision/ActingOnClimateChange/ClimateChangeSolutions/VancityIsCarbonNeutral/

Your Guide to the Ancient Forest Friendly™ Designation

Usage guidelines, marketing advantages and the science behind the brand. Available online at: marketsinitiative.org/index.php?page=your-guide-to-the-ancient-forest-friendly-designation

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